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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.                | CONFIRMATION NO.       |
|---|-------------|----------------------|------------------------------------|------------------------|
| 10/825,800  | 04/14/2004  | Darrin Leonhardt     | N.C. 95,876                        | 1602                   |
| 26384 7590 03/16/2007<br>NAVAL RESEARCH LABORATORY<br>ASSOCIATE COUNSEL (PATENTS)<br>CODE 1008.2<br>4555 OVERLOOK AVENUE, S.W.<br>WASHINGTON, DC 20375-5320 |             |                      | EXAMINER<br>MCDONALD, RODNEY GLENN |                        |
|   |             |                      | ART UNIT<br>1753                   | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>03/16/2007            | DELIVERY MODE<br>PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/825,800

Applicant(s)

LEONHARDT ET AL.

Examiner

Rodney G. McDonald

Art Unit

1753

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 06 March 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new-matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.



Rodney G. McDonald  
Primary Examiner  
Art Unit: 1753

Continuation of 11. does NOT place the application in condition for allowance because:  
of the reasons set forth in the final rejection.

Specifically, the amendment necessitated the new ground of rejections because a new 35 U.S.C. 112 1<sup>st</sup> paragraph rejection has been raised and adjustments to the 35 U.S.C. 103 rejections have been made based on narrowing of the scope of the claim.

Regarding the 1<sup>st</sup> paragraph rejection, Applicant has tried to narrow the claims to exclude a magnetic field. Applicant's specification requires that where there is "a separation between the plasma sheet and the substrate" a magnetic field is required. This limitation of "a separation between the plasma sheet and the substrate" is also in the pending independent claims. Separation between the plasma sheet and the substrate is shown in Fig. 1 for example.

In embodiments where the electron plasma sheet is directed at the substrate no magnetic field is required but in this case there is no "separation between the plasma sheet and the substrate". This is specifically shown in Fig. 4 for example.

Applicant's current claims appear to support the case of Fig. 1 discussed above where a magnetic field is required and excluding such a magnetic field would constitute new matter.

With regard to the 103 rejections Applicant has argued that Manheimer is a theoretical discussion and is not applicable to the claims. The Examiner maintains the position that Manheimer's teaching shows a system in Figure 1 capable of controlling the ion and free radical bombardment of a substrate in a large area. Such treatment could include pretreatment before conventional plasma processing such as etching. Clearly the system of Figure 1 is not a theoretical system and has been utilized by Manheimer to suggest Applicant's system.

With regard to the exclusion of the magnetic field it is argued that Collins et al. is cited to show the exclusion of a magnetic field for producing a sheet plasma. Manheimer et al. recognize that LAPPS has the disadvantage of requiring a magnetic field to confine the beam and the magnetic field has little effect on ion transport in the LAPPS. Manheimer et al. recognize a need for beams without this disadvantage. Therefore, it would be obvious to replace the plasma generating means of Manheimer with the plasma generating means of Collins et al. because of the disadvantages noted by Manheimer and the fact that Collins et al. recognize that a uniform plasma can be produced with their means having no magnetic field.

In response to Applicant's argument that the age of the Collins reference prohibits using Collins feature in Manheimer since the problems still exist in the art, it is argued that contentions that the reference patents are old are not impressive absent a showing that the art tried and failed to solve the same problem notwithstanding its presumed knowledge of the references. See *In re Wright*, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977).